PCS providers of scarce spectrum necessary for the development of PCS services expected to compete with landline service. Such a scheme would unfairly single out an entity with monopoly local exchange facilities for special licensing consideration without justification.

Cox also disagrees with the observation in the Notice that LEC participation in PCS as a service provider may result in LECs designing landline architecture in a "PCS friendly" manner. As the series of Commission rulings on cellular interconnection and interconnection complaints attest, the LEC cellular set aside did not result in design of "cellular friendly" interconnection architecture. In fact, the LEC set-aside effectively eliminated any real opportunity for cellular to become a local exchange competitor. The same result is likely if spectrum is placed in a special status for LEC access and participation in PCS.

LECs already have an enormous financial stake and will participate significantly in PCS by providing interconnection and advanced intelligent network functions to all PCS licensees. Additionally, LECs will not be foreclosed from developing a wireless local loop using unlicensed Part 15 PCS spectrum and equipment. LEC cellular has and will continue to evolve into a microcell service provider even without assignment of additional spectrum.

Unassigned spectrum in the 1850-1990 MHz band can be used more effectively to address the spectrum constraints that will be faced by PCS providers who must accommodate fixed microwave users. There is no public policy reason to accord LECs any special consideration for PCS spectrum. If, at some later

time, the Commission believes that local competition is sufficiently well established, LECs could be licensed to provide residential wireless phone service in a higher frequency band which would be more appropriate for this essentially fixed service.

V. PCS LICENSING MECHANISMS

A. The Commission's Role Is to Ensure that PCS Providers Are Well Qualified

The <u>Notice</u> requests comment on the desirability of several licensing mechanisms for PCS and the need for reformulating lottery regulations if such a licensing scheme is adopted. Cox consistently has urged the Commission to select licensees based upon their demonstrated qualification to develop a service.

Despite the Commission's perceived drawbacks of comparative hearings, it is the one mechanism best suited to ensure that the licensees selected are the ones most committed and technically able to speed service to the public.

The Commission repeatedly has reformed its lottery processes, without demonstrable success, to prevent speculative filings and subsequent staff resource intensive transfer applications. In spite of their obvious shortcomings, if the Commission relies on lotteries to select PCS licensees, its licensing procedures must be structured to ensure that only those entities that have fully satisfied rigorous requirements sufficient to merit serious consideration in a comparative hearing be eligible. Among the criteria the Commission could apply

^{23/} Amendment of Part 90 to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Services, 7 FCC Rcd 898 (1992).

would be the stated goals of the PCS <u>Notice</u>: universality; speed of deployment; diversity of services; and competitive service delivery.

Cox suggests that technical, financial and legal qualifications be demonstrated, supported by affidavits, in every PCS application. A stringent financial showing should be required. Further, the Commission should require letters of credit or escrow deposits of a significant amount at the time of filing to demonstrate the good faith of an applicant and to deter those not committed to developing high quality PCS networks.

In contrast, the <u>Notice</u>'s proposal for postcard lotteries will open the floodgates of speculation. Threshold showings of basic technical, financial and legal ability to provide PCS will assist in the conservation of the Commission's administrative resources and provide the Commission with sincere applicants.

VI. FULL, FAIR AND COST-BASED INTERCONNECTION IS CRITICAL TO PCS

The Commission should use PCS as a means to open up local exchange competition through adoption of mandatory cost-based network unbundling, number portability, co-carrier compensation and equal access to LEC signalling systems and informational databases. Additionally, to the extent a PCS provider switches and terminates a call for a LEC, just as PCS providers will pay LECs for this service, reciprocal compensation must be required.²⁴

^{24/} It is a measure of the overwhelming control landline carriers have over cellular carriers that such an obviously fair requirement, adopted by the Commission in 1987, has never been successfully enforced. The Need to Promote Competition and (continued...)

High quality, broadly available interconnection that is unbundled and cost-based is critical to establish strong local exchange competitors and local exchange competition. The frustrating experiences of interexchange carriers, cellular service providers and alternative access providers in seeking fair, cost-based interconnection from the LECs should be instructive as the Commission attempts to fashion its PCS ground rules. The Commission must develop rules and policies that recognize the continuing LEC incentives to forestall true local competition.

The Notice proposes that PCS interconnection standards should entitle any PCS provider to obtain reasonable interconnection at rates and terms no less favorable than those offered by the LEC to any other customer or carrier. Under the Commission's proposal the choice of appropriate types of interconnection would remain with the PCS provider.

The Commission's interconnection proposal is inadequate to establish PCS as a true local competitor. Because cost-based unbundled interconnection at the local level has not yet been achieved, currently available rates and terms for LEC interconnection will perpetuate LEC dominance of the local loop.

<u>24</u>/ (...continued)

Efficient Use of Spectrum, 2 FCC Rcd 2910 (1987) aff'd on recon. 4 FCC Rcd 2369 (1989).

^{25/} Notice at 5715.

Further, a PCS provider still may encounter difficulties in its efforts to discover "most favored nation" rates and terms. For example, even though LEC services often are tariffed at the state and federal level, many traffic exchange agreements between LECs are unavailable for public review.

Moreover, certain services are not tariffed or are supplied at "market-clearing" rates in order to support existing state or federal subsidies.

The most favored nation proposal also provides no incentive for LECs to make available to PCS providers new services or functionalities that the LECs do not otherwise provide to themselves. PCS providers will need to purchase more than just basic interconnection from LECs to provide certain network functionalities and capabilities that the PCS operator cannot or chooses not to provide. PCS operators must, of course, be able to obtain only the elements and functionalities they seek and must be obligated to pay only for those particular services at a cost based rate. The rules and principles established by the Commission in its Expanded Interconnection proceedings should also be applied to assure that network functions and network capabilities are available to all PCS providers at unbundled, cost based rates. Otherwise, a situation where the LEC can refuse to provide these services can quash the emergence of competitive alternatives, like PCS, in the local loop.

^{26/} Expanded Interconnection with Local Telephone Company Facilities, Report and Order and Notice of Proposed Rulemaking, FCC 92-440, CC Docket Numbers 91-141 and 92-222, released October 19, 1992.

Cox agrees with the <u>Notice</u> that the Commission should not at this time attempt to set particular technical interconnection standards. Cox also agrees that the reasonableness of any particular form of physical PCS interconnection is most appropriately determined by the Commission, rather than at the state or local level.

Cox supports the Commission's determination that it not preempt state and local rate regulation of PCS interconnection. The Commission, nevertheless, must monitor state developments to assure that interconnection rates do not frustrate the federal right of interconnection.

VII. UNIFORM STANDARDS ARE CRITICAL TO THE SUCCESS OF PCS

The setting of PCS technical operating standards is fundamental to the definition of the service. The Commission simply will not have defined PCS as a service until it sets clear standards for operation. Merely describing PCS as a "family of mobile or portable radio communications services" could lead to PCS spectrum use for services better situated in other parts of the spectrum. Even though the Notice proposes adopting only limited standards for PCS, Cox submits the Commission should adopt standards to define basic operating parameters and to facilitate intersystem operation.

A range of approaches to standard setting is available. The approach suggested in the Notice, minimal technical standards and no intersystem operation or compatibility requirements, provides maximum flexibility for licensees with little or no guidance from the Commission. Past experience

demonstrates that new services often flounder without the adoption of clear technical operating standards.

A. The Commission Should Adopt Standards for Intersystem Operation

The Commission should adopt the same technical standards for intersystem and unlicensed operations. The Commission's experience with Specialized Mobile Radio ("SMR") plainly demonstrates that, without such standards, the growth of PCS will be stymied and the market fragmented. While the Commission need not adopt such standards with the Order resulting from this Notice, the Commission should not hesitate to dictate a timetable for the adoption of standards formulated by the industry. These standards should be uniform among all PCS frequency blocks and encourage compatibility with all unlicensed PCS devices operating in the 1850-1990 MHz band.

The Notice presupposes that individual markets or PCS providers will be large enough to eliminate the pressing need for establishing standards for intersystem operability. The Commission cannot depend on that approach. To ensure the creation of seamless wide area systems the Commission should promulgate standards for uniform intersystem operability.

The divergent experiences of the cellular and SMR industries plainly demonstrate the need to adopt standards for intersystem operation. When the Commission created the cellular radio service it also adopted standards for intersystem operation. The ability to use one cellular telephone throughout the

United States was and remains a critical factor in the success of the cellular industry.

Moreover, competition among PCS providers will develop only if consumers are able to switch service providers without paying an exorbitant price. For example, in the cellular industry, a consumer can transfer service between Block A and Block B providers without sacrificing his investment in the cellular phone. In contrast, because the Commission never set technical standards for SMR, those customers can only use their equipment on compatible systems, lessening the opportunity for expanded area coverage and roaming arrangements.

Failure to adopt uniform technical standards will seriously impede the development of PCS. Experience in other services demonstrates that manufacturers are reluctant to fund product research and development when there are no minimum standards. Any equipment that is produced in this uncertain climate will be priced to reflect the manufacturer's assessment of the risk that its equipment will not become a <u>de facto</u> standard. This higher equipment cost makes service more expensive to consumers and heightens the risk the customer will have purchased equipment that cannot be used if the customer wants to change carriers and may quickly become obsolete.

B. The Commission Should Adopt Technical Standards

The adoption of flexible technical standards will not limit innovation. Using standards as a base, manufacturers can move ahead rapidly,

^{27/} Further, because cellular phones operate on the same technical standards they can be mass produced, with resulting economies of scale.

without fear of losing their research and development investment, to innovate within the parameters of the standard.

The adoption of technical standards is critical to the definition of the service. The development of technical standards has been left to the market before with unfortunate results. For example, the proposed AM stereo service failed primarily because the Commission did not set standards. Therefore, the Commission could allow the PCS industry a set period of time to demonstrate whether consensus is possible. If consensus is not achieved, the Commission should solicit comment and expeditiously adopt standards that allow reasonable flexibility in the development of PCS systems. Some standards must be set, however, consistent with the Commission's vision of the service.

VIII. CONCLUSION

Cox submits that PCS presents an historic opportunity for the Commission to begin to inject competition into the last bastion of monopoly telecommunications -- the local loop. Existing broadband cable television infrastructure makes possible the offering of a portable residential

^{28/} Cox is aware of efforts to develop PCS Common Air Interface ("CAI") standards and believes that the results should be considered by the Commission. Ultimately, the Commission must determine which standards should be used by all PCS providers.

^{29/} AM Stereophonic Broadcasting, 51 R.R. 2d 1 (1982) (determining to not set a standard and, instead, to rely on market forces to select appropriate AM stereo system).

telecommunications service alternative that offers quick deployment, universality, competition and diversity.

Cox agrees that the Commission should license the number of PCS providers consistent with efficient spectrum utilization. However, because PCS spectrum is congested with wideband users, many of whom cannot be relocated, each PCS provider needs a minimum 40 MHz block of spectrum plus the ability to call on reserve spectrum if it can demonstrate that it is severely spectrum constrained.

Licensing PCS on a Major Trading Area basis best balances the advantages and disadvantages associated with too large and too small licensing areas. Cox opposes the suggestion that PCS markets be licensed on a non-uniform basis.

There are strong public policy reasons not to permit LECs or LEC cellular affiliates to participate in PCS as licensees in their telephone service areas. Further, any award of a LEC PCS spectrum set-aside or to relieve LECs from existing cellular separate subsidiary obligations would undermine the potential for competition offered by PCS.

Cox favors comparative hearings as the best mechanism to ensure a qualified applicant is selected in the licensing process. If lotteries nevertheless are used for PCS licensing, rigorous standards should be applied to ensure that applicants are qualified and committed to providing service. Fair, unbundled and cost-based interconnection will be critical to the development of PCS.

Finally, the Commission has an important role to play in standard setting. Cox believes that uniform standards among PCS providers and compatibility of unlicensed PCS devices are critical to developing interoperability and roaming among service providers. If the industry cannot achieve consensus, the Commission should adopt standards.

Respectfully submitted,

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November 9, 1992